

REMARKS

The Office Action objects to the specification, drawings and claims 9, 27-41, and 43-48. The Office Action rejects claims 1-48. The objections and rejections are obviated or traversed below, and reconsideration of all claims is respectfully requested.

Applicant cancels claim 26 without prejudice or disclaimer. Applicant amends the specification and claims 1, 8, 9, 12-15, 19-25, 27, 29-31, 33-35, 37, 39, 40, and 42-48. Accordingly, claims 1-25 and 27-48 are pending.

Objection to the Drawings

On Form PTOL-326, the Office Action objects to the drawings. However, the Office Action does not specify the reason for the objection to the drawings. Accordingly, withdrawal of this objection is respectfully requested.

Objection to the Specification

The Office Action objects to the specification because the title is not descriptive of the invention. Applicants amend the title to obviate this objection.

The Office Action objects to the specification because the terminology recited in claim 26 is not supported by the specification. Applicant cancels claim 26 without prejudice or disclaimer, noting the same subject matter is still maintained as being inherent in the remaining claims.

Accordingly, withdrawal of the objection to the specification is respectfully requested.

Objection to the Claims

The Office Action objects to the typographical error in claim 9. Applicant amends claim 9 to obviate the objection.

The Office Action objects to the preamble of claims 27-41. Applicant amends the preamble of independent claims 27, 31, 33, 35, 39 and 42 to obviate the objection.

The Office Action objects to method claim 28 because method claim 28 only recites a desired result instead of method steps. Applicant amends claim 27 from which claim 28 depends to further clarify the features of claim 28 and to obviate the objection.

The Office Action objects to claim 40 because the Examiner cannot find support in the specification and drawings for the features recited in claim 40. Applicant respectfully submits that the drawings and specification support the features recited in claim 40 including at least paragraph [0043] and at least Figures 2, 4 and 5.

The Office Action objects to claims 43-48 for failing to further limit their respective parent claim. Applicants amend claims 43-48 to obviate these objections.

Accordingly, withdrawal of the objections is respectfully requested.

Rejection of Claims under 35 U.S.C. §112, first paragraph

Claims 26 and 27 are rejected under 35 U.S.C. §112, first paragraph as failing to comply with the enablement requirement. Claim 26 is cancelled without prejudice or disclaimer, and claim 27 is amended to obviate the rejection. Applicant respectfully submits that the drawings and specification support the features recited in claim 27 including at least paragraph [0043] and at least Figures 2, 4 and 5.

Accordingly, withdrawal of the rejection is respectfully requested.

Rejection of Claims under 35 U.S.C. §112, second paragraph

Claims 14 and 17 are rejected under 35 U.S.C. §112, second paragraph as failing to comply with the enablement requirement. Applicant amends claims 14 and 17 to obviate the rejection.

Accordingly, withdrawal of the rejection is respectfully requested.

Rejection of Claims under 35 U.S.C. §102(b)

The Office Action rejects claims 8-12 and 14-25 under 35 U.S.C. §102(b) as being anticipated by JP 2000-215449. The U.S. patent equivalent is U.S. Patent 6,480,450 to Fujii et al. (hereinafter both references are referred to as "Fujii"). This rejection is respectfully traversed.

Fujii does not disclose teach or suggest at least, "generating said multi pulse chain with a plurality of pulses having at least two different width sets, with at least one width set comprising more than one equal width pulse," as recited in claim 8 from which claims 9-11 depend.

Fujii discloses a recording pulse including a multiple pulse set which is generated to form a pit. The pulse widths within the pulse set are set to be sequentially smaller or are set to be sequentially larger. Therefore, as shown in Figure 1 of Fujii, each pulse width within the pulse set is sequentially smaller than the previous pulse width.

In contrast, the present invention provides for the claimed multi-pulse chain to have at least two different width sets, with at least one width set comprising more than one equal width pulse. Therefore, for at least these reasons, it is respectfully submitted that claim 8 patentably distinguishes from the cited references.

Claims 9-11 depend from claim 8 and include all of the features of that claim plus additional features not taught or suggested by the cited references. Therefore, for at least these reasons, it is respectfully submitted that claims 9-11 also patentably distinguish over the cited references.

Fujii does not disclose teach or suggest at least, "generating an optical recording pulse having a first pulse, a multi-pulse chain, and a last pulse, said multi pulse chain having a plurality of pulses with a plurality of width sets, with at least one width set comprising more than one equal width pulse," as recited in claim 12 from which claims 14-22 depend.

Fujii discloses a recording pulse including a multiple pulse set which is generated to form a pit. The pulse widths within the pulse set are set to be sequentially smaller or are set to be sequentially larger. Therefore, as shown in Figure 1 of Fujii, each pulse width within the pulse set is sequentially smaller than the previous pulse width.

In contrast, the present invention provides for the claimed multi-pulse chain having a plurality of width sets, with at least one width set comprising more than one equal width pulse. Therefore, for at least these reasons, it is respectfully submitted that claim 12 patentably distinguishes from the cited references.

Claims 14-22 depend from claim 12 and include all of the features of that claim plus additional features not taught or suggested by the cited references. Therefore, for at least these reasons, it is respectfully submitted that claims 14-22 also patentably distinguish over the cited references.

Fujii does not disclose teach or suggest at least, "changing at least one of said pulses of said multi pulse chain to have sets of pulses with at least two different width sets, with one width set comprising more than one equal width set," as recited in claim 23 from which claims 24-25 depend.

Fujii discloses a recording pulse including a multiple pulse set which is generated to form a pit. The pulse widths within the pulse set are set to be sequentially smaller or are set to be sequentially larger. Therefore, as shown in Figure 1 of Fujii, each pulse width within the pulse set is sequentially smaller than the previous pulse width.

In contrast, the present invention provides for the claimed multi-pulse chain having at least two different width sets, with at least one width set comprising more than one equal width pulse. Therefore, for at least these reasons, it is respectfully submitted that claim 23 patentably distinguishes from the cited references.

Claims 24-25 depend from claim 23 and include all of the features of that claim plus additional features not taught or suggested by the cited references. Therefore, for at least these reasons, it is respectfully submitted that claims 24-25 also patentably distinguish over the cited references.

Rejection of Claims under 35 U.S.C. §102(b) or in the alternative by 35 U.S.C. §103(a)

The Office Action rejects claims 1-7, 27-41 and 42-48 under 35 U.S.C. §102(b) as being anticipated by, or in the alternative, under 35 U.S.C. §103(a) as obvious over Fujii. This rejection is respectfully traversed.

Fujii does not disclose teach or suggest at least, "said multiple-pulse chain has a plurality of pulses, with at least two different width sets, with at least one width set comprising more than one equal width pulse," as recited in claim 1 from which claims 2-7 depend.

Claims 2-7 depend from claim 1 and include all of the features of that claim plus additional features not taught or suggested by the cited references. Therefore, for at least these reasons, it is respectfully submitted that claims 2-7 also patentably distinguish over the cited references.

Fujii discloses a recording pulse including a multiple pulse set which is generated to form a pit. The pulse widths within the pulse set are set to be sequentially smaller or are set to be sequentially larger. Therefore, as shown in Figure 1 of Fujii, each pulse width within the pulse set is sequentially smaller than the previous pulse width.

In contrast, the present invention provides for the claimed multi-pulse chain having at least two different width sets, with at least one width set comprising more than one equal width pulse. Therefore, for at least these reasons, it is respectfully submitted that claim 1 patentably distinguishes from the cited references.

Fujii does not disclose teach or suggest at least, "a multi-pulse chain having a second pulse width set having a second width and a third pulse width set having a third width,...wherein at least one of said second pulse width set and said third pulse width set comprises more than one equal pulse width, " as recited in claim 27 from which claims 28-30 depend.

Fujii discloses a recording pulse including a multiple pulse set which is generated to form a pit. The pulse widths within the pulse set are set to be sequentially smaller or are set to be sequentially larger. Therefore, as shown in Figure 1 of Fujii, each pulse width within the pulse set is sequentially smaller than the previous pulse width.

In contrast, the present invention provides for the claimed multi-pulse chain having a second pulse width and a third pulse width with at least one width set comprising more than one

equal width pulse. Therefore, for at least these reasons, it is respectfully submitted that claim 27 patentably distinguishes from the cited references.

Claims 28-30 depend from claim 27 and include all of the features of that claim plus additional features not taught or suggested by the cited references. Therefore, for at least these reasons, it is respectfully submitted that claims 28-30 also patentably distinguish over the cited references.

Fujii does not disclose teach or suggest at least, "a multi-pulse chain having at least two pulses with a second width in a second width pulse set and a third width in a third pulse width set different from said second width,.... wherein at least one of said second pulse width set and said third pulse width sets comprises more than one equal pulse width, " as recited in claim 31 from which claim 32 depends.

Fujii discloses a recording pulse including a multiple pulse set which is generated to form a pit. The pulse widths within the pulse set are set to be sequentially smaller or are set to be sequentially larger. Therefore, as shown in Figure 1 of Fujii, each pulse width within the pulse set is sequentially smaller than the previous pulse width.

In contrast, the present invention provides for the claimed multi-pulse chain having a second width set and a third width set, with at least one width set comprising more than one equal width pulse. Therefore, for at least these reasons, it is respectfully submitted that claim 31 patentably distinguishes from the cited references.

Claim 32 depends from claim 31 and includes all of the features of that claim plus additional features not taught or suggested by the cited references. Therefore, for at least these reasons, it is respectfully submitted that claims 32 also patentably distinguish over the cited references.

Fujii does not disclose teach or suggest at least, "a multi-pulse chain having at least two pulses of a second width set where each second pulse has a second width, a third pulse width set having a third width, and a fourth pulse width set having a fourth width, ...said second width of said second pulse width set different from said third and fourth widths, " as recited in claim 33 from which claim 34 depends.

Fujii discloses a recording pulse including a multiple pulse set which is generated to form a pit. The pulse widths within the pulse set are set to be sequentially smaller or are set to be sequentially larger. Therefore, as shown in Figure 1 of Fujii, each pulse width within the pulse set is sequentially smaller than the previous pulse width.

In contrast, the present invention provides for the claimed multi-pulse chain having a second width set, a third width set, and a fourth width set with at least one width set comprising more than one equal width pulse. Therefore, for at least these reasons, it is respectfully submitted that claim 33 patentably distinguishes from the cited references.

Claim 34 depends from claim 33 and includes all of the features of that claim plus additional features not taught or suggested by the cited references. Therefore, for at least these reasons, it is respectfully submitted that claim 34 also patentably distinguish over the cited references.

Fujii does not disclose teach or suggest at least, "preparing a first recording pulse including first pulse width set having a first width, a multi-pulse chain having at least two pulses of a second pulse width set where each second pulse has a second width, a third pulse width set having a third width, and a fourth pulse width set having a fourth width, and a last pulse having a last width in order, said second, third, and fourth widths being different from each other," as recited in claim 35 from which claim 36-38 depend.

Claims 36-38 depend from claim 35 and include all of the features of that claim plus additional features not taught or suggested by the cited references. Therefore, for at least these reasons, it is respectfully submitted that claims 36-38 also patentably distinguish over the cited references.

Fujii does not disclose teach or suggest at least, "preparing a first recording pulse including first pulse width set having a first width, a multi-pulse chain having a second pulse width set having a second width and a third pulse width set having a third width, and a last pulse having a last width in order, said second width of said second pulse width set different from said third width of said third pulse width set, wherein at least one of said second pulse width set and said third pulse width set comprises more than one equal pulse width , " as recited in claim 39 from which claims 40-41 depend.

Claim 41 depends from claim 40 and includes all of the features of that claim plus additional features not taught or suggested by the cited references. Therefore, for at least these reasons, it is respectfully submitted that claim 41 also patentably distinguishes over the cited references.

Fujii does not disclose teach or suggest at least, "a controller controlling said recording pulse generator to generate a third pulse width set with a third width different from said second width of said second pulse width set of said multi-pulse chain, said third pulse width set inserted into said multi-pulse chain of said optical recording, pulse, wherein at least one of said second

pulse width set and said third pulse width set comprises more than one equal pulse width, " as recited in claim 42 from which claim 43-48 depend.

Fujii discloses a recording pulse including a multiple pulse set which is generated to form a pit. The pulse widths within the pulse set are set to be sequentially smaller or are set to be sequentially larger. Therefore, as shown in Figure 1 of Fujii, each pulse width within the pulse set is sequentially smaller than the previous pulse width.

In contrast, the present invention provides for the claimed multi-pulse chain having a second width set and a third width set with at least one width set comprising more than one equal width pulse. Therefore, for at least these reasons, it is respectfully submitted that claim 42 patentably distinguishes from the cited references.

Claims 43-48 depend from claim 42 and include all of the features of that claim plus additional features not taught or suggested by the cited references. Therefore, for at least these reasons, it is respectfully submitted that claims 43-48 also patentably distinguish over the cited references.

Rejection of Claims under 35 U.S.C. §103(a)

The Office Action rejects claim 13 under 35 U.S.C. §103(a) as being unpatentable over Fujii. This rejection is respectfully traversed.

Claim 13 depends from claim 12 and includes all of the features of that claim plus additional features not taught or suggested by the cited references. Therefore, for at least these reasons, it is respectfully submitted that claim 13 also patentably distinguishes over the cited references.

Summary

Claims 1-25 and 27-48 are pending and under consideration. It is respectfully submitted that all of the pending claims satisfy the requirements of 35 U.S.C. §112. Further, it is respectfully submitted that none of the references taken alone or in combination disclose the present claimed invention.

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

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If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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